

ABSTRACT

The invention relates to the genome sequence and the nucleotide sequences coding for polypeptides of cyanophage S-2L. According to the invention, the polypeptides include, but are not limited to, polypeptides involved in the synthesis, transcription and replication of purine bases. In particular, determining the genome of cyanophage S-2L is useful for supplying genes which, expressed in recombinant bacteria, enable the synthesis of DNA monomers incorporating base D (2,6 diaminopurine instead of base A (adenine), thereby producing chemically-remodelled nucleic acids in the bacteria.